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ABSTRACT OF THE DISCLOSURE

A system for transmitting, storing, retransmitting and receiving a plurality of electronic medical images, which permits diagnostic readings by physicians during irregularly occurring periods of down time, where each of the electronic medical images contains an indicia, e.g., bid price, of the priority attached to it by a patient, includes first through fourth computer systems. The first computer system includes an associated scanning device for generating the electronic medical images, the second computer system includes an electronic medical image storage memory for storing the electronic medical images in a predetermined order based on the indicia in the respective electronic medical images, the third computer system includes a first display for displaying the selected one of the electronic medical images, and the fourth computer system includes a second display for monitoring all of the electronic medical images, and an input device for changing one of the indicia in a respective one of the electronic medical images thereby changing the predetermined order. The second and third computer systems are connected by both a low speed communications channel for instructing the second computer system to download the selected one of the electronic medical images to the third computer system, and a high speed communications channel for downloading the selected one of the electronic medical images from the second computer system to the third computer system. Methods of operating this system are also described.